CLAIMS:

1. A method for determining a projection beam source intensity distribution and optical proximity correction rules for a patterning structure for use with a lithographic projection apparatus comprising:

patterning a projection beam according to a desired pattern;

selecting a plurality of features of the desired pattern to be imaged;

notionally dividing the radiation in the radiation system into a plurality of source elements;

for each source element:

calculating a process window for each selected feature and determining the optical proximity correction rules that optimize the overlap of the calculated process windows;

selecting those source elements for which the overlapping of the process windows and the optical proximity correction rules satisfy specified criteria; and

outputting data relating to the selected source elements, which define a source intensity distribution and optical proximity correction rules.

2. A method according to claim 1, further comprising projecting the patterned beam onto a target portion of a substrate.

3. A method according to claim 1, wherein one criterion for the selecting source elements is that the overlapping process window exceeds a predetermined threshold.

4. A method according to claim 1, wherein one criterion for the selecting source elements is that the optical proximity correction rules for the selected elements are substantially the same.

5. A method according to claim 1, wherein selecting the source elements comprises identifying a region in a vector space, defined by the optical proximity rules, which has a high density of source elements.

6. A method according to claim 1, further comprising calculating the outputted optical proximity correction rules on the basis of a source intensity distribution that corresponds to the sum of the selected source elements.

7. A method according to claim 1, wherein each source element comprises four sub-elements, symmetrically disposed, one in each quadrant of the source.

8. A method according to claim 1, wherein each source element comprises at least one set of two sub-elements, said two sub-elements being disposed in opposite halves of the source.

9. A method according to claim 1, wherein said dividing the radiation into a plurality of source elements further comprises:

choosing a first set of sub-elements;

choosing a second set of sub-elements; and

creating combinations of the first and second set of sub-elements as each of the source elements in turn.

10. A method according to claim 1, further comprising producing a beam-defining member, insertable into the radiation system, for creating a source intensity distribution in the radiation system which corresponds substantially to the sum of the outputted selected source elements.

11. A method according to claim 1, further comprising producing a patterning structure, wherein the pattern of the patterning structure contains optical proximity correction features according to the outputted optical proximity correction rules.

12. A computer system comprising a processor and a storage, the processor being adapted to process data in accordance with an executable program stored in the storage, wherein the executable program comprises machine executable instructions for performing the method of claim 1.

13. A machine readable medium comprising machine executable instructions for performing the method of claim 1.

14. A method of manufacturing a device using a lithographic projection apparatus comprising:

creating a source intensity distribution in a radiation system of the lithographic apparatus for producing a projection beam which corresponds substantially to a sum of the selected source elements output by the method of claim 1;

defining a pattern of patterning structure for patterning the projection beam containing the optical proximity correction rules output by the method of claim 1; and

exposing a target area of a layer of energy-sensitive material on a substrate, using the patterned radiation beam.

14. A device manufactured in accordance with the method of claim 13.

15. A method of producing an imaging configuration for a lithographic projection apparatus comprising:

selecting a pattern to be imaged;

selecting a plurality of imaging source elements;

calculating respective process parameters for selected features of the pattern;

determining optimized optical proximity correction rules for the process parameters; and

selecting optical proximity correction patterns for inclusion in a patterning structure to be used with the lithographic projection apparatus according to the determined optical proximity correction rules.